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RESEARCH PAPER

Sustaining Multifunctional Forestry Through the Developing of Social Capital and Promoting Participation: A Case of Multiethnic Mountain Communities

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Abstract Communities with multicultural, ethnically diverse populations located in forest areas of the Carpathian Mountains often face serious social and economic problems, including high unemployment rates, weak social support and institutions with little stakeholder participation in decision-making. In this paper, we apply participatory scenario processes to address the development of multifunctional forestry in these mountains by taking as an example the case study of Slovensky Raj National Park and specifically focusing on the involvement of local communities, particularly the Roma minority, in sustainable forest management (SFM). The paper argues that development of local institutions and promotion of horizontal and vertical participation to increase social capital is necessary for addressing social and economic problems, managing potential conflicts and sustaining multifunctional forestry development. The results suggest that the way forward is the integration of multi-purpose forest management with community development, and that learning, repeated stakeholder interaction, trust-building and cooperation between and within multiethnic local communities are important preconditions for success. The scenario process applied turned out to be beneficial for both the majority and the minority populations, particularly allowing for discussions about future development of mountain regions, their local economies and communities, and for providing some guidance about what are the preferred actions for participation in multifunctional SFM.

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Introduction

Collaboration of stakeholders operating at different levels of governance is an increasingly important tool for sustaining multifunctional forest management. Creation of opportunities for a wider and more meaningful collaboration among stakeholders, including forest owners and managers, would help in operationalizing the principles of sustainability. Collaboration may lead to improved understanding of cause-effect relationships between ecological and socio-economic systems, forming a basis for more informed decisions at various levels (Lessard 1998; Berkes et al. 2003; Nijnik et al. 2009). When investigating these "coupled" relationships, we focus on the multiple functions and services of forest ecosystems, including biodiversity, cultural heritage, amenity and sustainable production, and on the well-being of local communities. Sustainable provision of ecosystem services is an important objective of sustainable forest management (SFM). SFM can be defined as the stewardship and use of forests and forest land in a way and at a rate that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, without causing damage to other ecosystems (MCPFE 2007).

Most Central and Eastern European (CEE) countries have valuable forest resources including protected areas, national parks, timber and non-timber products. Previously, they were owned and managed almost exclusively by the state under the principles of a planned economy and a heavily-subsidized socio-economic system. In CEE countries the restitution of forestland to private owners began in the mid 1990s, and is now almost complete. Currently, private forest ownership varies across these countries from 16% in Poland to 60% in Slovenia. Private forests in Slovakia comprise 50% by area, including forests owned by individuals and groups (37%), municipalities and communities (10%) and by churches (3.2%) (Nijnik et al. 2009). Almost 80% of all private forests in the region are small holdings, and in Slovakia these represent 85% of all private forests (Nijnik et al. 2009).[1] Transitional changes, with the emergence of many small scale forestry (SSF) owners and private companies in timber production, wood processing, non-timber forest products, and in forest tourism and recreation, along with other factors, have resulted in a significant drop in the level of employment in the forestry sector, largely leading to impoverishment of communities located in the vicinity of the forests (Soloviy and Cubbage 2007).[2]

[1] According to Hirsch et al. (2007), in Europe as a whole, about 7% of private forests by area could be considered as SSF.

[2] For example, in Central Europe employment in the forestry sector dropped by 4.5% annually during 1990–2000 and by 3.6% annually during 2000–2005 (MCPFE 2007).

Multiple stakeholders (e.g. forest owners, users, rural households, farmers and individuals) currently represent the social, environmental and economic interests in the areas of CEE countries where the majority of forests are located. SFM legislation and practice would need to be built on the integration of priorities of these diverse stakeholders, including those of many new forest owners, and would require their effective participation through their deeper involvement in policy development and implementation (Kouplevatskaya-Yunusova and Buttoud 2007). The need for horizontal and vertical cooperation among different stakeholders arises largely from the need to deal simultaneously with multiple SFM objectives and multiple forest functions and services in the context of the multi-ethnic communities with diverse stakeholder preferences and capacities. Effective realization of policies for sustainable use of multiple ecosystem services and sustainable mountain livelihoods requires participation, capacity development and well-established institutions, both formal and informal, linked to strong social capital (Brown et al. 2007).

Social capital includes social and political environments that enable norms to develop and that shape social structures, including horizontal associations among people and vertical hierarchical formal institutions such as governments (Serageldin and Grootaert 2000).[3] To build social capital, many authors suggest the building of trust and reciprocity through learning from repeated stakeholder interactions (Ostrom and Ahn 2003; Putnam 1995). As individuals participate more in communities and civic activities, they learn to trust each other. The greater the trust that individuals have in each other the more likely they are to participate in decision-making. This creates a virtuous circle in which trust promotes cooperation and cooperation develops trust. It increases as previously closed networks are opened up through the learning process, and with reforms that lead to the loosening of elite networks (Paldam and Svendsen 2000). Some theories argue that trust arising from individual and civic interactions has a positive effect on the increase of confidence in new governance structures.[4] These structures, community networks and bottom-up cooperation that enhance social capital are considered to be particularly important for policy reforms (Brehm and Rahn 1997).

However, it is generally accepted that authoritarian systems weaken social capital (Paldam and Svendsen 2000; Putnam 1995) leading to a number of dysfunctional elements (Lin 2000b). In former command-and-control economies, state monopoly and administrative regulation resulted in the dramatic decline of trust in formal institutions and in the erosion of effective participation and collaboration in planning and decision-making (Nijnik and Oskam 2004). Various 'grey/black' networks (Paldam and Svendsen 2000) were often created as a result (Portes and Landolt 2000), and social capital was based on the informal networks that rely on trust among friends and face-to-face interactions rather than on multi-stakeholder and multi-institutional cooperation. This phenomenon brought about by past

[3] Serageldin and Grootaert (2000) build this description from the definitions by Putman (1995), who analysed horizontal associations among people, including networks of civic engagement and social norms, and by Coleman (1988), whose broader concept includes not only social structures and norms of governing, but also interpersonal behaviours.

[4] Empirical evidence has been provided, for example, by Brehm and Rahn (1997).

experiences has led to the weakening of voluntary cooperative engagements (Paldam and Svendsen 2000) in favour of interpersonal relationships (Murray 2005) and, sometimes, in favour of the so-called "politonomy" (see Nijnik and Oskam 2004). The 'closed networks' with rather weak formal institutions (Portes and Landolt 2000; Nijnik and Oskam 2004) often exclude from decision-making those who are not members of the political elite, rejecting public discussions and their potential constructive criticism which might have encouraged the system to improve. This factor has contributed to the slow growth of processes of democratization, also decreasing the effectiveness of resource/ecosystem management, including in mountain forestry in the CEE region (Nijnik 2004; Nijnik and van Kooten 2006; Tomićević et al. 2010).

The multiethnic mountain communities including those in CEE are diverse in social status, cultural origins, gender interests, socio-economic characteristics and levels of social capital (Buchy and Race 2001). However, social capital cannot be seen as a good that exists at the community level, benefiting all members of the community equally. This is particularly obvious when dealing with ethnic or other minorities. Lin (2000a) showed that communities with stronger social ties within racial or ethnic groups,[5] but with weaker links to other groups, show low involvement in horizontal associations outside their groups and in vertical formal institutions. There are significant distributional effects, and societies with weak or indifferent public institutions and isolated social networks, as the result of entrenched inequality for example, serve to undermine existing systems of law enforcement, and have lower cooperation, and weaker societal capacity to respond effectively to economic shocks.[6]

In this paper, the case study of communities in the Slovensky Raj National Park (SRNAP) is analysed as an example, with a specific focus on the involvement and means of participation of the Roma minority in sustaining multifunctional forest management. As suggested by Brehm and Rahn (1997) in the areas inhabited by ethnic minorities, social networks are often weak and there is low trust that could be improved by creating opportunities for participation and repeated interactions between individuals who are to become willing to cooperate and learn from each other. Furthermore, these opportunities for cooperation and participation need to provide venues for community members to express their views instead of imposing the visions of those with a better access to decision-making (Lin 2000b). Taking this into account, we specifically focus on exploring opportunities for increasing of social capital by identifying preferred ways of interaction among multi-ethnic communities to promote cooperation and the capacity development needed to maintain collaboration in the context of two municipalities of the SRNAP. Key questions addressed by this paper are as follows:

- What are stakeholder preferences and insights into future developments and local decision-making in the region, with a particular focus on multifunctional forest management?

[5] Lin (2000b) described the weaker cooperation across different ethnic groups in Latin America.

[6] This could undermine the effectiveness of even the most carefully conceived development strategies and management plans (Caroll 2001).

- What are the key vertical and horizontal ways of participation and collaboration among different stakeholder groups in the context of multifunctional forest management in the two municipalities of the SRNAP and how effective are the participatory processes?
- What are the specific contributions of the identified ways of participation and collaboration between Roma and non-Roma to their engagement in local decision-making in these mountain municipalities?

The paper first outlines the conceptual elements of social capital and participation as applied in the context of multifunctional SFM. This is followed by the basic methodological approach, our discussion about the case study area of the Slovenský Raj National Park (SRNAP) and the municipalities of Letanovce and Spišské Tomášovce, their major challenges, and key research results from the case study. Finally, we conclude with a discussion of the major findings of our empirical work and some brief closing remarks.

Methodology

The economic situation in mountain regions with valuable forest resources (e.g. in national parks, protected areas with endemic species, including in Slovakia) is often considered as disadvantaged in comparison with other regions in the same countries (Nijnik et al. 2009). Deepening regional disparities, together with a lack of investment[7] in areas away from major economic centres, cause impoverishment, higher levels of unemployment and migration of local populations. Disadvantage is also caused by the limited diversification of the mountain economy, which is focused on timber production and tourism, often with no proper consideration of other forest ecosystem services; by poor infrastructure; geographical barriers; and by under-utilization of human resources. Waste dumping, illegal cutting of forests, and extensive informal mushroom and berry picking in some localities have also had negative impacts on the natural environment. Moreover, in recent years, some mountain areas have been experiencing an increasing number of non-regulated tourists, at times alongside the construction of huge recreational complexes. We have analyzed nearly all of these trends in the context of the Slovenský Raj ("Slovak Paradise") National Park case study.

Case study Description

The Slovenský Raj Park was legally established as a protected area in 1964. In 1988, its status was upgraded to that of "national park", in recognition of its considerable scenic and recreational value (see Fig. 1, overleaf). The park is surrounded by eight municipalities with almost 70 thousand inhabitants and more than 600 thousand

[7] Investment in infrastructure in these areas tends to be costly because of their terrain and remoteness and these costs are significantly higher than available municipal budgets.

Fig. 1 The study area. *Legend* Area of the SRNAP is marked by the *grey dashed-line* and the study area is in the *black circle*. *Source* Slovakia Property Investment (n.d.)

park visitors annually. The primary economic activities within the park are tourism,[8] tree planting and timber production. A large share (42%) of the land within the SRNAP is now privately owned by SSF owners. Biodiversity protection and park management are led by a Nature Conservation Administration with limited authority over the private land. Forest management priorities are set by national and regional representatives of the Ministry of Agriculture and Rural Development and adopted by the forest owners with very limited consultation of other stakeholder groups. However, limited monitoring, lack of clear enforcement of these priorities and lack of appropriate incentives for sustainable practices on the part of forest owners has resulted in the expansion of intensive economic activities, especially of tourism and timber harvesting (Kluvankova-Oravska and Chobotová 2006).

We used a case study approach following Yin (2003). The phenomenon under study is the participation and collaboration of stakeholders, particularly ethnic minorities, in multifunctional forest management in SRNAP. In this research, we limit the boundaries of the case study to two municipalities located directly on the park border, those of Letanovce and Spišské Tomášovce.

Letanovce has a population of 2,100 people, and Spišské Tomášovce has approximately 1,600 inhabitants (Census 2010). Both these settlements have significant Roma populations ranging from more than 40% in Spisske Tomasovce up to 62% in Letanovce (ETP 2009). The average level of employment of the Roma population in the analyzed settlements is officially 31%. If we count seasonal labour, the employment may be as high as 60%. However, seasonal employment is usually illegal,[9] and thus is not included in official statistics. Approximately 95% of

[8] Recently, in some areas of the park—especially in those with high biodiversity and aesthetic values—there has been an expansion in tourism resulting in income generation for the local population.

[9] A seasonal employee is not registered, and thus neither pays taxes, no contributes to pension, health and employment insurance. He or she could still be registered as unemployed or could remain not registered in either of the systems.

Roma in the area have been educated only to primary school level, which in the past was taught only in the Slovak language. This has changed in recent years when teaching in the Roma language was introduced in pre-school and first grade of primary schools (Roma Education Fund 2007). However, development and implementation of local programmes, including those focused on education and SFM, are weak due to the widespread lack of horizontal and vertical interaction—including poor communication and cooperation between key local actors and forest/land owners—and due to an overall low engagement in planning and decision-making among different population groups, municipalities, private companies and governing bodies.

The situation is slowly changing and municipal representatives, including council members and mayors, are now more focused on the interconnected activities of several mountain community centres with the primary objective of strengthening governance structures and increasing participation, especially of the Roma population, in forest resource management and sustainable provision of multiple ecosystem services in forestry. Therefore, when planning for multifunctional forest management in the SRNAP, minority groups (e.g. Roma settlements) are to be taken into consideration, including the major characteristics of such settlements and the multiple challenges that arise.

Methodological Approaches

A sequence of methods was applied to investigate the types of interactions and levels of participation in multifunctional forest management by Roma and non-Roma populations[10] in the communities of the SRNAP in our case study. The focus was on horizontal and vertical participation in stakeholder decision-making concerning SFM. During our initial discussions[11] with stakeholders, including representatives of Roma groups and SSF owners, it became clear that they were very concerned about the worsening quality of natural resources, which impacts adversely on both the quality of local environments and potential revenues from tourism in the park, and also about the lack of cooperation between key players that could influence any further decisions and actions. Stakeholders were specifically interested in comparing experiences of participation between the majority and minority populations in the two municipalities in the case study to learn about their successes and failures. Because of municipal leaders' increasing interest in forest management, sustainable multifunctional forestry and SFM, stakeholders were also interested in developing the basis of a potential plan that could be further developed into a local SFM management plan. Stakeholders' demands created a specific focus for the overall research approach. These demands required an elaboration of a participatory scenario development methodology to enable a structured dialogue

[10] In this research we focused on two major groups Roma and non-Romas. By the term non-Roma population we refer to different nationalities including Slovaks, Czechs, Polish, and Ukrainian. In the case study, non-Roma stakeholders included mayors, council members, SSF owners, local business owners and civil society members.

[11] The authors of the paper, especially Livia Bizikova, were directly involved in conducting the interviews and workshops.

among stakeholders in targeted municipalities about their future development, means of participation and interactions, and the role of forests and their management (e.g. Edmunds and Wollenberg 2000; Volkery et al. 2008). A brief overview of the scenario development method is provided in Box 1, and the process itself is explained further.

At the beginning of this study, 40 guided interviews with local stakeholders were conducted in the two municipalities of Spišské Tomášovce and Letanovce, with only 2 stakeholders refusing to be interviewed. The interviews were conducted in September–October 2006 by the authors; on average each interview lasted from 45 to 75 min. The respondents included the mayors, council members, SSF owners, local business owners, civil society representatives and 20 representatives of the Roma communities in the SRNAP. In line with the literature review, interviews focused on community services, welfare status, and multi-purpose use of forest resources, and identified the major criteria and issues that should be accounted for when addressing SFM and regional development. These interviews were also an effective instrument for engagement with relevant stakeholders. The interviews stimulated actors' interests, making them feel represented in the ongoing research. Thanks to the interviews, we also gained information about local knowledge and experiences related to our research questions, such as the type and quality of participatory activities between and with Roma and non-Roma people, in the municipalities and in the region, as well as details and examples about the opportunities for and actual involvement of the interviewees in decision-making on issues related to SRNAP management, tourism and multifunctional forestry relevant to our study.

The second element in the participatory process was directly focused on participatory scenario development by using a series of workshops, as recommended by Kok et al. (2006) and Wollenberg et al. (2000). We applied the PSD in a form of

Box 1 Participatory scenario development (PSD)—brief overview

In general, the scenario method refers to a general category of techniques associated with creative visioning (Wollenberg et al. 2000). Unlike projections, scenarios do not indicate what the future will look like. Scenarios instead stimulate creative ways of thinking that help stakeholders break out of established patterns of assessing situations and planning actions, so that they can better adapt to the future (Jaeger et al. 2000; UNEP 2002). In order to fully explore opportunities from scenarios, much attention is being devoted not only to the developed scenarios, but also to the scenario development process. This includes an increasing emphasis on stakeholder involvement in the developing of scenarios—referred to as participatory scenario development (PSD). To increase ownership and enhance the societal relevance of the scenarios it was decided to use a rather broad participatory approach (Volkery et al. 2008; Bizikova et al. 2009; Kok et al. 2006). Participatory scenario development has been applied in earlier studies focused on forestry and the following key contributions were identified (as compiled by Evans et al. 2008, selected):

The use of scenarios allows local stakeholders to develop strategies that encourage self-reliance and strengthen intra-community collaboration

The concrete products of the scenarios—drawn or written visions, prioritized lists of needs, strategies and proposals—served as records of decision-making processes validated by the community

This method strengthened group discussions and broadened participation in decision making and in the development of practical strategies because the methods provided techniques and practical experience via meetings in which all participated

four one-day stakeholder participatory workshops designed to reveal preferred future developments, goals and actions focusing on multifunctional forest management and promoting participation in local decision-making (an overview of the PSD process applied in the case study is presented in Fig. 2). The design of the scenario workshops was based on the proposed methodology of Kok et al. (2006) which has been tested and applied in a number of European countries. This process helps integrate the qualitative and partial knowledge of multiple individuals into coherent scenarios over different time-horizons (Kok et al. 2003, 2006).

The workshops, with 10–26 participants, involved mayors, council members, forest owners, representatives of SRNAP, community centres and Roma stakeholders from the two communities. Some 30% of workshop participants had previously been interviewed. Trained facilitators led the workshops, which took place between October 2006 and March 2007. During the workshops, a baseline scenario, a preferred future scenario, and short-term goals and actions were elaborated to reflect the development challenges of Roma and non-Roma communities closely tied to the local, mountain forestry context.

During the first workshop, participants discussed and ranked six major criteria influencing SFM in the region and also the key issues that should be considered when setting the criteria. The criteria and issues had been identified through the guided interviews and were available for review. After reviewing the criteria, the participants of the first workshop outlined their primary preferences and interests across the criteria, concerning SFM, multifunctional forestry and regional development (Table 1). The major criteria included education, infrastructure, employment, rural tourism, multifunctional forest management and community identity.

During the subsequent three workshops, participants collectively developed three scenarios (see Table 2). In the second workshop, we focused on developing the baseline scenario that uses the identified criteria and extrapolates past and current

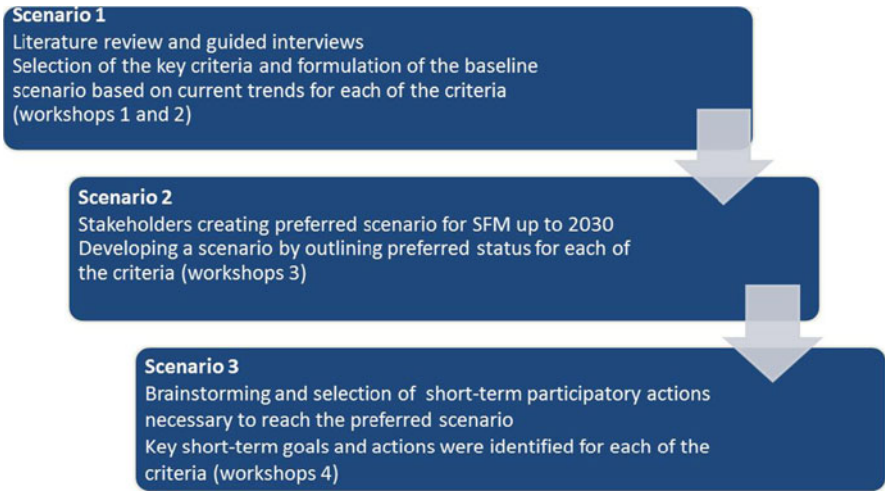

Fig. 2 Key steps and their contribution to the scenarios development

Table 1 Distribution of major preferences of the stakeholders involved in this research

	Roma in Letanovce N = 10	Roma in Spišské Tomášovce N = 10	SRNAP representatives N = 8	Mayors and council members N = 10	SSF owners N = 10	Community centre representatives n = 8
Criteria for the scenarios						
Infrastructure development	+++++	+++++	++	+++++	++	
Rural tourism		+++		+++++		
Employment	+++++	+++++		+++++	+	++
Education	+++	++++	+	++		++++
Sustainability of activities carried out in the park	+		++++	++	++++	+
Community identity	+	+	++	+++++	+	++
Cross-cutting issues						
Conservation, ecosystem and biodiversity protection	++++	+++	++++		++	++
Participation in decision-making	++	+++	++++		++++	++++
Participation in the community	++	+++	+++	+		++++

The criteria and the issues were identified through the guided interviews during the first steps of our research

Legend + equals one vote; each participant had up to three votes

trends as reported by stakeholders. During the remaining two workshops, two additional scenarios were developed, focusing on different time frames. One scenario served as the preferred scenario of SFM in the mountain region, which included ways for participation over the next 20 years (up to 2030) and the other scenario outlined short-term transitions (of 3–5 years; up to 2015) that could put the community on the path to achieving the preferred scenario.

Results

Horizontal Associations in the Communities

Local communities primarily see prospective multifunctional forest management in the region as a source of employment and income generation through tree planting

Table 2 Overview of the developed scenarios

Criteria	Scenarios		
	Baseline scenario based on the interviews and Workshops 1 and 2	Preferred scenario created (approx. 2,030) Workshop 3	Short-term goals and actions to reach the preferred scenario (approx. 2,015) Workshop 4
Infrastructure	State support redistributed to the priorities identified by representatives of the municipalities	Municipality leaders and stakeholders are involved in identifying the most vulnerable and pressing areas for infrastructure and applying for different sources of funding	Conduct a review of the current state of the infrastructure with a focus on municipalities; identify priority areas for infrastructure development Hold a public hearing about infrastructure development plans
Employment	State support and local employment offices will actively participate in programmes for long-term unemployed residents	Local NGOs, representatives of employment offices and representatives of Roma will identify areas for jobs linked to rural/community development Closer collaboration with SSF owners to explore opportunities for local employment	Create a dialogue with community centres on methods that work with Roma and non-Roma communities Municipal offices and the park administration to contact SSF owners and organize regular meetings in the region
Education	Municipal leaders are involved in shaping educational systems according to the needs of the population	Programmes for Roma children of pre-school age are created to help them prepare for school in the Roma language Issues of resource management and sustainability are added to the curriculum	Develop a short course on nature conservation and SRNAP for schoolchildren (involving parents) Develop educational material on SRNAP in a number of languages, including Roma
Rural tourism	Create an agency that helps local communities in applying for grants for tourism and rural development	Identifying opportunities for tourism involving not only those areas that are close to the park Explore opportunities for rural development grants and for collaboration with private owners	Review the status of seasonal labour with labour offices Explore opportunities for support to unemployed provided by the agencies for tourism development and training
Promotion of sustainable activities in SRPNAP	Create a monitoring system of activities at a municipal level	Create a monitoring system of unsustainable activities and educate locals about natural values of the park	Regular public review of the state of the park and coordination of the monitoring process with forest owners

Table 2 continued

Criteria	Scenarios		
	Baseline scenario based on the interviews and Workshops 1 and 2	Preferred scenario created (approx. 2,030) Workshop 3	Short-term goals and actions to reach the preferred scenario (approx. 2,015) Workshop 4
Community identity	Municipal office will be responsible for activities aiming to support community identity	Create space for Roma to represent themselves and promote shared events	Commitment of key leaders to start regular consultations on community identity in different places in SRNAP Consider developing partnerships with other municipalities from neighbouring countries.

and timber production and/or forest tourism and recreation. However, overall reduction in employment in forest management, together with changes in welfare support during the transition process, have worsened the already unfavourable socio-economic situation in this mountain region, with the most significant impacts on the Roma minority. (The distribution of preferences about the criteria and issues, as identified by the stakeholders participating in the study, is shown in Table 1). This situation, as both Roma and non-Roma respondents indicated during the interviews, is a primary cause of unsustainable use of forests and negative impacts on the protected mountain areas. The activities leading to decline of protected areas include timber felling, extensive fruit and mushroom collection and increasing car thefts in the parking places designated for tourists. As was also mentioned by non-Roma respondents, this situation was having several negative effects on the entire rural community of the SRNAP, with the most significant effects on sustainable provision of forest multiple ecosystem services, e.g. tourism, regulatory and supporting forest functions, and community and cultural identity. Small scale forest owners were also concerned about these activities, as seen in Table 1.

Despite these negative trends in both Letanovce and Spišské Tomášovce, community members describe increasing interactions between Roma and non-Roma residents, including creation of opportunities for shared activities (for example, within community centres), as the most important strategy to help build relationships and develop mutual trust. To address an unsustainable performance, a series of targeted educational activities has been initiated by local non-profit organizations that have been working in the region for at least 5 years. A programme of training for forest guards to control forest resource use was found to be successful in reducing environmental damage to the forest, while also increasing civic participation by creating a platform for regular stakeholder interactions. The programme created opportunities for stakeholder participation

through regular meetings that built on the need for environmental protection and sustainable provision and use of forest multiple ecosystem services, also involving Roma knowledge of the region. These meetings also provided opportunities to obtain information about issues affecting the Roma minority, including access to employment. It was also suggested that the creation of a system to monitor unsustainable activities and the education of the local population about the natural values of the park should become priority actions.

Roma participants expressed their interest in learning more about maintaining valuable natural resources. However, as was described by one Roma participant: "We can't see our role in this (forest conservation)." During the workshops, Roma participants reported that recent changes in the education system, with teaching in the Roma language in the first grades of elementary school, have helped motivate children and their parents to participate in activities involving their schools, and indicated a need for more education about sustainability in resource management. A non-Roma participant stressed that "education about forest management and how to do it well is needed for everybody; none of us who have no forestry education really knows what is in our forests and how valuable it is."

It is highly probable that in the mountain municipality of Letanovce, poor social conditions and conflicts between Roma and non-Roma residents have tended to create the sense of urgency that led to higher interest in cooperation, increased interest in interpersonal involvement in horizontal cooperation, such as the work of community centres, and discussions on potential involvement in timber production, especially in municipal forests. Educational activities for adults and children in both languages focusing on nature protection and cultural events are being organized by community centres. As described by a local council member: "We have nothing to lose if we make it work together with Romas and non-Romas, all of us can benefit; otherwise things are going to get even worse." Such activities were listed by the mayors of both municipalities as an effective way to built relationships and introduce new issues such as biodiversity protection and forestry, community tree planting and gardening. They also see an opportunity to use these venues for consultations about multi-purpose forest management.

In Spišské Tomášovce, the situation of the Roma minority is better than in Letanovce, in terms of the level of employment and the quality of local infrastructure. However, interaction between members of the Roma minority and non-Romas is fairly low, especially because of the lack of effort to organize specific common activities. During the interviews, participants reported that they did not feel part of a community, either Roma and/or non-Roma, and could not recall efforts to provide shared activities. As participants noted: "You either have had good relationships with your neighbours and friends for a long time, or almost no chance to create connections. We don't know where we belong." Roma participants emphasized that, in specifying the scenarios, more attention should be paid to identification of conditions for horizontal interactions focused on building relationships within their community. Especially in the short-term (Scenario 2 in Table 2 overleaf), participants recognized the importance of community centres that can provide a forum for Roma to get engaged in various free-time or educational

activities and in this way build stronger relationships among themselves and with non-Roma who are interested in being involved in this work.

Developing a community identity was recognized by all as being of major importance for achieving multiple SFM objectives. In Spišské Tomášovce, where Roma culture and traditions are not part of local development, Roma participants expressed their concern that local identity is driven by the majorities living in the region. In both localities, Roma were interested in being involved in the participatory processes. It seems that the promotion of trust and participation in the case study area can lead to improvements at local level, but the results of such a process are hard to predict and they depend on available resources, on who is excluded and what is demanded in exchange (Portes and Landolt 2000).

Vertical Cooperation with Formal Institutions

Almost all stakeholder groups were concerned about low participation in decision-making in the region (Table 1). In the case of the Roma minority, both their social and cultural ties, as well as their involvement in local decision-making have been worsening over the last few decades (Vašecka et al. 2003; Brearley 1996). In the municipality of Tomasovce, low levels of bottom-up interpersonal interactions were observed, exerting a negative influence on locally driven participation. For example, Roma participants reported: "we have public meetings about some community issues, but none of us would go, because they won't take our comments seriously anyway." This tendency is especially clear when participation in decision-making about local timber production and tourism activities are considered. It was reported during the workshops that Roma involvement in decision-making concerning expansion of tourist services, summer festival preparation and tourist information development is generally very low and no improvements have been observed so far.

A low level of participation in decision-making at the municipal and park administration levels, and overall limited coordination with and among small scale forest owners have limited the involvement of Roma communities in forestry. Until 1995, the forest sector was a major source of employment for Roma. Nowadays, this is not the case. As described by a Roma participant from Spišské Tomášovce: "In the past, we would have the chance to work in the forest to help in wood processing, but these days the forest managers would rather bring people from elsewhere for the job and then they leave." Even some representatives of the park reported that they have very limited contact with forest owners, and that there is an overall lack of skills and experience in bringing stakeholders together. The participants, including SRNAP representatives and the mayors, reported that they have very limited contacts with SSF owners; that the majority of forest owners lease their forests to companies to harvest timber; and that these companies tend to employ seasonal labour from elsewhere rather than provide employment for local people. As one council member described: "We have very limited awareness of what the (forest) owners plan to do, we barely know them; they don't see us as somebody who would need to be involved or who could help them in management; we are here at the end."

Respondents also expressed strong interest in moving towards increasing involvement of municipal representatives, Roma, and members of community organizations in developing local educational activities regarding multifunctional forest management, and sustaining the provision of multiple ecosystem services from forestry. As suggested by the participants, this process can be guided by national courses of action adjusted within community processes, as outlined in Scenario 2, and further specified in Scenario 3. Such activities could be linked to wider educational and capacity-building activities to provide information about opportunities for self-employment, tourism development and potential agricultural activities in the areas surrounding the park and about the natural values of the park. Nowadays, the participants do not see any viable economic options. This is partly due to the above-mentioned reliance on state support in addressing unemployment and rural development, but also due to the lack of experience and opportunities of Roma and non-Roma populations to become involved in small businesses and local and regional planning (Scenarios 2 and 3). Roma participants also suggested that the development of such activities would need to be conducted with the involvement of non-Roma, the SRNAP park administration and small scale forest owners. Almost half of the forests are owned by private owners who emphasized that better collaboration is desirable to ensure that priorities in tourism, timber and rural developments are complementing each other.

Discussion

The case study outcomes allow us to argue that socio-economic development, participation of local people in decision-making and local collaboration can be seen as determinants in ensuring SFM objectives, multiple forest functions and services in the SRNAP. As found by Larson (2009), integration between social and economic elements of community development turned out to be a key element in promoting SFM. However, as shown by our case study, this integration needs to be focused not only on local socio-economic situations concerning local employment and income, but also on finding ways to collaboratively define avenues for integration and more effective participation relevant for different stakeholders groups. This could often mean that further efforts are need to increase the capacities of stakeholders to enable their engagement. Fien and Skoien (2002) emphasized that such collaborations both at horizontal and vertical levels provide opportunities for stakeholders to understand the value and ways of implementing SFM practices.

However, a low level of collaboration between Roma and non-Roma communities, and their weak participation in decision-making, have created unfavourable conditions for the development of local livelihoods and advancing multifunctional SFM in the case study area. Furthermore, in the mountain regions with diverse minorities and ethnicities, Lin (2000b) emphasized that the local population cannot be seen as a homogenous group. Therefore in areas with multi-ethnic communities multiple dimensions of sustainability and SFM, including cultural and educational dimensions, need to be considered in development programmes and forest

management plans. The need for complex inclusive actions representing these multiple dimensions tied to the needs of the Roma populations was recognised by workshop participants. Such actions should build on the integration of economic, social and cultural opportunities for development of local communities alongside with some vital poverty reduction measures for Roma in the region.

Trust can be identified all through this study as a key determinant of the quality of cooperation and participation. Interpersonal relations dominated the trust observed in this study. Similarly to other experiences from CEE countries (for example Paldam and Svendsen 2000; Murray 2005) the level of general trust in formalized rules lags behind interpersonal trust. Low trust in combination with hierarchical governance in Spišské Tomášovce has resulted in stagnation in community participation despite several activities that were organized by external bodies and the municipality. However, within the Roma population in Letanovce, the character and intensity of cooperation, fuelled by the need to address pressing issues, created a platform for repeated interactions leading to increased trust and a more positive experience of participation. This provides a specific example of how enhancing regular interactions leads to potential for cooperation, learning about each other (Brown et al. 2007) and trust-building (Brehm and Rahn 1997).

The significant increase in the number of private owners mostly representing SSF over a short period of time in Slovakia and other CEE countries increases the number of stakeholders that need to be involved in SFM (Nijnik et al. 2009). As found by Tomićević et al. (2010) from research in Serbia, effective involvement of SSF owners and managers in decision-making, especially in a form of vertical participation in the planning process, is low and was seen as a key factor for forestry's low effectiveness in the context of SFM in SRNAP. Representatives of the SRNAP and minority groups were both concerned about their low involvement in decision-making, including in forest management. In Slovakia the focus so far has been on ensuring that forests are returned to their owners. However, it is also important to improve institutions and governing structures that could integrate collaboration with and among stakeholder groups including new forest owners and managers, and promote their participation to help achieve SFM and sustainable livelihoods. Nevertheless, this is a challenging task that would require conscious efforts over time to repeat collaborations and interaction until these newly established institutions and governing structures can effectively contribute to policy-making (Kouplevatskaya-Yunusova and Buttoud 2007). Furthermore, focusing on strengthening social capital seems to be crucial for enhancing community resilience and ability to adapt to change, thus enhancing future prospects for development (Kilpatrick 2002), which are highly relevant for the next phase of the transition in multifunctional forest and natural resource management in CEE and similar multi-ethnic mountain regions.

This research helped in assessing current and potential ways of participation and levels of social capital and turned out to be useful in discussing multiple forest services and SFM with its diverse characteristics, consequences and opportunities for local people. The use of scenarios created a platform for local institutions and for social learning through the involvement of Roma and non-Roma representatives, including local decision-makers. Compared to other studies, (e.g. Evans et al.

(2008); Wollenberg et al. (2000)) in which scenarios were targeted to performance of the forest sector itself, the scenario process applied in our research benefited both majority and minority mountain populations, facilitated discussions about future economic development, and identified preferred actions for participation in SFM to sustain ecosystem services.

Concluding Remarks

The identified scenarios with different means of horizontal and vertical cooperation provided good examples of what types of participatory actions are needed and relevant for different groups of stakeholders. Scenarios also promoted a structured approach to interaction between communities and contributed to collaborative planning and negotiations between communities and authorities. The PSD helped community leaders and marginalized groups within communities, like members of the Roma population, to become more vocal and assertive in meetings, through their explicit involvement in the scenario development process. The study assisted the observed municipalities to get closer to creating local SFM management plans, and follow-up activities required in the communities. These will need to address the main areas of concern for future developments as well as create a participatory local planning process to translate the development priorities identified in Scenario 3 to local goals and actions.

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